## **Magnetostrictive Linear Position Sensor**

### Square housing / slide & floating magnet Start/Stop pulse

L5 - HXXXX-14



#### **Profile**

- · Outside installation, easy to use
- Absolute position output, without zero operation
- · Contactless sensing with highest durability
- Design of low power consumption, reduce the temperature drift
- Slide magnet with joint bearings, can withstand large lateral stress

## (€ ® ♥ Start/Stop

#### **Features**

- · Start/ Stop pulse
- Floating magnet, maximum vertical distance 15mm

Parameter of measurement				
Measuring Lenght	50~3000mm			
Output	Start/ Stop pusle			
Resolution	0.1 mm / 0.01 mm / 0.005 mm(depend on controller)			
Linearity	< ±0.02% F.S.(Min.±60μm)			
Repeatability	$< \pm 0.002\%$ F.S.			
Frequency response	Depend on Measuring range			

Electrical characteris	lectrical characteristics				
Connection	Cable or M12,8 pinsConnector				
Voltage	24VDC (-15 / +20%)				
Current	< 60mA (depend on Measuring range)				
Polarity protection*	Max30VDC				
Overvoltage protection*	Max. 36VDC				
Electric strength	500V (DC ground to machine ground)				
Error indicator	Red and Green LED indicator				

<sup>\*</sup> Max. 5mins

- Linearity deviation < ±0.02% rated length
- Repeatability < ±0.002% rated length

Design & Material	
Sensor head	Inside
Sensor stroke	Aluminium alloy
Mounting holder	304LStainless

Installation & Accessories				
Installation direction	Any orientation			
Installation	Mounting holder, M5×20Specified screw			
Magnet	Flat rail sliding block magnet L5-0000-ACMB-0004, Not included in delivery			
	Trapezoid Floating MagnetsL5-0000-ACMB-0005, Not included in delivery			
	Rectangle Floating MagnetsL5-0000-ACMB-0006, Not included in delivery			
Mounting holder	L5-0000-ACMT-0002, Not included in delivery(At leaset two)			
Connector	E1-1208-0101, Not included in delivery			

Operation condition	
Magnet speed	Any
Operating temperature	-40°C ~ +85°C
Humidity/Dew point	R.H.90%, No Condensation
Temperature coefficient	< 30ppm/°C
Protection Level	IP65

	Sensor diagnostic display					
		Indicato	r	Description		
		Green	ON	Normal function		
		Green	Flash	Programming mode		
		Red	Flash	Magnet out of measuring range		
		Red	ON	Magnet not detected or damaged magnet		

#### Wiring

Signal	Ub	GND	Start (+)	Start (-)	Stop (+)	Stop (-)
Cable(color)	Brown	White	Yellow	Gray	Pink	Red
M12, 8 Pins Connector	7	8	1	2	3	4

M12, 8 pinsPin top view (sensor)



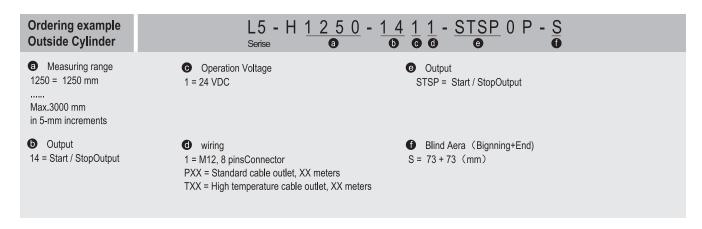
30 www.heinlanz.com



### **Magnetostrictive Linear Position Sensor**

Square housing / slide & floating magnet Start/Stop pulse

L5 - HXXXX-14



# **Dimensions** Flat rail sliding block magnet Beginning Blind Aera 73 End Blind Aera 73 Measuring range M5X20 14.5 50 Beginning Blind Aera 73 End Blind Aera 73 Trapezoid Floating Magnet Measuring range 38 Beginning Blind Aera 73 Rectangle Floating Magnet Measuring range End Blind Aera 73

Note: (1) Default delivery 2pcs mounting clamps, there will be more one each 500mm longer than 1000mm.

(2) Position measurement is via floating magnets travelling along the sensing rod without any mechanical contact. Square floating magnet: Max.Horizontal offset upto ±3mm, Max.Vertical distance upto 5mm.

www.heinlanz.com 31